ABSTRACT OF THE DISCLOSURE

A servo writer applies magnetic reproduction signals having a uniform amplitude even with a plurality of magnetic recording heads. The servo writer has an exciting current controller for applying an exciting current to each magnetic recording head to record a magnetic pattern on a magnetic disc, a magnetic reproducing head for reading a magnetic reproduction signal based on the magnetic pattern, a peak detector for holding a peak value read from the magnetic reproduction head, and a CPU for controlling the application of the magnetic pattern so that all the exciting currents are uniformly applied to the magnetic recording heads. The CPU calculates and stores the correction value corresponding to each magnetic recording head based on the peak values detected by the peak detector, and supplies the correction value to the exciting current controller.